UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

•				
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,165	06/22/2006	Eric Labarriere	12928/10033	4739
²⁶⁶⁴⁶ KENYON & K	7590 01/14/2008 FNVON LLP	Eric Labarriere 12928/10033 EXAMINER PALABRICA, RICAR ART UNIT PA 3663	INER	
ONE BROADWAY NEW YORK, NY 10004			PALABRICA, RICARDO J	
			ART UNIT	PAPER NUMBER
		3663		
			MAIL DATE	DELIVERY MODE
	-		01/14/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

•		Application No.	Applicant(s)	
		10/584,165	LABARRIERE ET AL.	
	Office Action Summary	Examiner	Art Unit	
		Rick Palabrica	3663	
Period fo	The MAILING DATE of this communication apport	pears on the cover sheet with the	e correspondence address	
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLICATION OF THE WAILING DON'S INCOME. FROM THE MAILING DON'S INCOME. THE MAILING DON'S INC	ATE OF THIS COMMUNICATION ATE OF THIS COMMUNICA	ON. timely filed om the mailing date of this communication. NED (35 U.S.C. § 133).	
Status				
_	Responsive to communication(s) filed on <u>06 D</u> This action is FINAL . 2b) This Since this application is in condition for allowa closed in accordance with the practice under E	s action is non-final nce except for formal matters, p		
Dispositi	ion of Claims			
5) □ 6) □ 7) □ 8) □ Applicati 9) □ 10) □	Claim(s) 16-30 is/are pending in the application 4a) Of the above claim(s) 19-21,26,27,29 and Claim(s) is/are allowed. Claim(s) 16-18,22-25 and 28 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or are subject to restriction and/or are specification is objected to by the Examine The drawing(s) filed on is/are: a) accomplicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine The Oath Oath Oath Oath Oath Oath Oath Oath	30 is/are withdrawn from consider election requirement. er. epted or b) □ objected to by the drawing(s) be held in abeyance. Stion is required if the drawing(s) is designed to be the drawing(s) is designed.	e Examiner. See 37 CFR 1.85(a). Objected to. See 37 CFR 1.121(d).	
		kanimer. Note the attached Offic	ce Action of form PTO-152.	
12)⊠ a)[Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority document Certified copies of the priority document Copies of the certified copies of the priority document application from the International Bureausee the attached detailed Office action for a list	s have been received. s have been received in Applica rity documents have been recei u (PCT Rule 17.2(a)).	ation No ved in this National Stage	
2) 🔲 Notic 3) 🔯 Inforn	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date 6/22/06.	4) Interview Summa Paper No(s)/Mail 5) Notice of Informa 6) Other:	Date	

DETAILED ACTION

1. Applicant's election without traverse of species E (as shown in Fig. 11), species of screw, with claims 16-18, 22-25, and 28 readable of these species, and amended claim 16, is acknowledged.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 16-18, 22-25, and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 recites the limitation "the adjacent longitudinal ends" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Claim 24 recites the limitations "the maintenance arrangement" and "the adjacent longitudinal ends" in lines 1 and 2, respectively. There are insufficient antecedent bases for these limitations in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 3663

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 16, 17 and 22-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Christiansen et al. (U.S. 5,490,191) who disclose a terminal end piece and a fuel assembly for a nuclear reactor.

As to claims 16 and 24, Christiansen et al. disclose (e.g., in Fig. 5) a terminal endpiece comprising an arrangement for laterally maintaining the adjacent longitudinal ends 53 of fuel rods12, the arrangement configured at nodes of a regular network.

Applicant's claim language "terminal end piece" reads on the combination of the lower tie plate 54 and spring element 55. The two elements of this combination represent two components, as in the claim.

Note from Fig. 9a, for example, that the longitudinal end 53 of fuel rod 12 is clamped between a vertical wall of one component (i.e., lower tie plate 54) and the other component (i.e., spring element 55).

As to claims 17 and 25, applicant's claim language "housings" reads on the holes 54e wherein the ends 53 of the rods are disposed (see Fig. 5 and col. 4, lines 48+).

As to claim 22, applicant's claim language, "bottom end-piece" reads on lower tie plate 54.

As to claim 23, applicant's claim language, "feet" reads on the legs 54a, 54b of the lower tie plate 54.

As to claim 28, applicant's claim language "widened feet" reads on the sloping upper part of longitudinal end 53 that is wider than its lower part (e.g., see Fig. 5).

Art Unit: 3663

The claims are directed to an apparatus and NOT to a process. However, the claims are replete with statements that are either essentially method limitations or statements of intended or desired use. For example, "for a fuel assembly", "for receiving the adjacent longitudinal ends ..." etc. These clauses, as well as other statements of intended use do not serve to patently distinguish the <u>claimed</u> structure over that of the reference, as long as the structure of the cited references is capable of performing the intended use. See MPEP 2111-2115.

See also MPEP 2114 that states:

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. <u>Ex parte Masham</u>, 2 USPQ2d 1647.

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531.

[A]pparatus claims cover what a device is, not what a device does." <u>Hewlett-Packard Co. v. Bausch & Lomb Inc.</u>, 15 USPQ2d 1525,1528.

As set forth in MPEP 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

The apparatus in the cited reference is capable of being used in the same manner and for the intended or desired use as the claimed invention. Note that it is sufficient to show that said capability exists, which is the case for the cited reference.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3663

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Christiansen et al. in view of Matzner et al. (U.S. 5,384,814). Christiansen et al. disclose the applicant's claim limitations except for an anti-debris filter.

Matzner et al. a plurality of anti-debris filter suitable for use in a fuel assembly such as Christiansen et al.'s (see, for example, Figs. 2-10).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus, as disclosed by Christiansen et al., by the teaching of Matzner et al., to include an anti debris filter for the fuel assembly, to gain the advantages thereof (i.e., prevent fretting damage to the fuel rods), because such modification is no more than the use of a well-known expedient in the nuclear art.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick Palabrica whose telephone number is 571-272-6880. The examiner can normally be reached on 6:00-4:30, Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3663

Page 6

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RJP January 8, 2008

> RICARDO J. PALABRICA PRIMARY EXAMINED